



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,308	11/25/2003	Yuhong Zheng	I-23791	7071
46582	7590	04/06/2007	EXAMINER	
MACMILLAN, SOBANSKI & TODD, LLC ONE MARITIME PLAZA - FOURTH FLOOR 720 WATER STREET TOLEDO, OH 43604			BURCH, MELODY M	
			ART UNIT	PAPER NUMBER
			3683	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/06/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)
	10/721,308	ZHENG ET AL.
	Examiner	Art Unit
	Melody M. Burch	3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 December 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 3,4,6-8,15,16 and 18-22 is/are pending in the application.
 - 4a) Of the above claim(s) 22 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 3,4,6-8,15,16 and 18-21 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Election/Restrictions

1. Newly submitted claim 22 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: it recites a distinct method of handling an avoiding an overpressure condition.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 22 has been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 20 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The originally filed specification fails to mention the pressure at the vehicle brake specifically being a non-zero positive pressure as recited in claims 20 and 21. If Applicant feels that the added limitation is

supported by the original specification, Applicant is asked to direct Examiner to the appropriate section(s) of the originally filed specification.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 4, 6-8, 15, 16, 18, 19, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB-2316986 (GB'986) in view of US Patent 6199378 to Aardema et al.

Re: claims 3, 6-8, 15, 16, 19, 20, and 21. GB'986 shows in figure 1 a method capable of controlling the pressure in an electrohydraulic braking system having a pump 14, an accumulator 28 and a valve arrangement 22,24 controlling pressure at a vehicle brake, comprising the steps of: sensing an accumulator pressure, comparing the sensed accumulator pressure to a preset pressure set point as disclosed in the last paragraph on pg. 4, controlling at least one valve in the valve arrangement 22,24 to allow fluid to flow through the valve if the sensed accumulator pressure at least equals the preset pressure set point, determining that the pump is running while accumulator pressure is above a pump shut-off pressure and providing an overpressure remedy of setting the maximum permissible pressure level below the permissible level of the fluid

system and electronically opening the valve when the set maximum permissible pressure level is reached as disclosed in the last paragraph on pg. 5 to the first paragraph on pg. 6, but lacks the limitation of providing a signal to bias the at least one valve to rapidly open to a point in excess of that which would be demanded based on accumulator pressure alone in *anticipation* of further pressure rise due to the pump failing to shut off.

Aardema et al. teach in col. 3 lines 40-55 the use of a control scheme used in a fluid system that remedies an overpressure situation by anticipating an overpressure condition then by sending an electric signal to the appropriate control valve to initiate movement of the control valve towards an open position prior to the overpressure condition occurring. See specifically col. 3 lines 46-53.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the manner of relieving an overpressure condition of GB'986 to have included a remedy, as taught by Aardema et al., in order to provide a means of preventing an overpressure condition from occurring to avoid component exposure to excessive system pressures to help preserve the integrity of the system's parts.

Re: claim 4. See the release valve 24 in figure 1 of GB'986.

Re: claim 18. See the apply valve 22 in figure 1 of GB'986.

Response to Arguments

6. Applicant's arguments, see pg. 8 of the Remarks, filed 12/22/06, with respect to the rejection(s) of claim(s) 3 and 18 under 35 USC 102 using the GB'986 reference

have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of GB'986 in view of Aardema et al.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmbr
March 28, 2007

Melody M. Burch
Melody M. Burch
Primary Examiner
Art Unit 3683
3/28/07